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FOREIGN AGRICULTURE

Inter-American Livestock Cooperation

Focus on Poland's Agriculture

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This week's cover:

A Polish farmer examines his wheat crop which has been reaped by combines like the ones pictured below. For a discussion of the current state of Polish agriculture see article begining on page 8.

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The Cattle Industry: An

Speaking early this month to the Inter-American Confederation of Cattlemen in San Antonio, Secretary of Agriculture* Clifford M. Hardin *urged members to lead a broad effort toward development of the area's total agriculture and trade.

There is a common bond between the Americas that ranges from the history of the discovery of this New World to the interchange of students and scientists in modern times," said Secretary Hardin to his audience of livestockmen from Western Hemisphere countries. "Our common bond includes trade, where many of our problems are similar—where, let's be frank, we have our troubles with you, and you have your troubles with us—and where we face mutual problems with other major trading countries.

"These bonds, I believe, add to the urgency of sharing and meeting our responsibilities in both the development of agriculture and of trade. And at the same time, they should make it easier for us to do so."

The Secretary, quoting the Confederation president's invitation to study together the problems of the Hemisphere's cattle industry, combined it with President Nixon's recent call for a Hemisphere partnership "guided by a healthy awareness that give-and-take is better than take-it-or-leave-it."

"Study together—give-and-take—working together—these are the requisites not only for a healthy cattle industry and a thriving Hemisphere, but also for a healthy agriculture, and for a peaceful prospering world," he said.

Agriculture a springboard to development

"I believe it is important that all of us in the Western Hemisphere study and work together to build and support a strong and efficient argiculture," the Secretary continued. "The reasons go beyond the humanitarian and primary urgency of millions of empty stomachs to the very practical fact that a sound world agriculture is the keystone of a sound world—socially as well as economically. It is plain good business to work for a strong agriculture, whether you are a cattleman, a banker, a bookkeeper, or own a chain of hotels. It is good business because in most of the developing countries agriculture must be the springboard to economic and social development as resources and energies devoted solely to the production of food are freed for other productive uses, generating new sources of income."

As individual incomes rise, the Secretary pointed out, so does the demand for goods and services—including demand for meat. Technology appears equal to the enormous task of feeding the 6 or 7 billion people of 30 years from today, better than ever in world history, he said; but only if the developed countries commit themselves to make the technology available and the developing countries commit them-

An Example of Cooperation in the Americas

selves to make the necessary adjustments to accept it. Among these adjustments he listed the investment of the men, money, and materials to create the programs, schools, and trained personnel needed for proper use of the technology.

Unfortunately, he commented, agriculture is a stepchild in most national plans and most national economies. Yet, in predominantly agrarian nations, the stability of government itself may depend on how much can be done for agriculture.

The Secretary continued, "Enthusiastic support for sound agricultural policies is just as important in the developed countries as in the developing. In the developed countries this means support for policies that permit the farmer to operate as freely and as efficiently as he can, his production geared to the domestic economy and the international market. And it means support for policies directed toward maintaining a world trade based on comparative advantage, in which both producers and consumers benefit from a freer flow of commodities based on efficiency of production and delivery.

"In the developing countries, it means a clear call must come from agriculture and all those connected with it for recognition and respect from government for agriculture as an important basic industry, vital to the national welfare. And it means a call to these governments for the personnel, programs, and institutions so necessary for it to grow."

Secretary Hardin urged the Hemisphere cattlemen to rally the diverse elements of agriculture in their own countries to present a united front, to speak together for agriculture.

The cattle industry of the Americas already has a considerable history of working together, said the Secretary; and he mentioned some of its joint efforts to improve productivity and efficiency, particularly by fighting pests and disease. Listing foot-and-mouth disease and the screwworm as two major causes of loss to cattle producers of the Hemisphere, he paid tribute to the cooperative endeavors that have been mounted against these two scourges.

What of world beef trade?

"But," said the Secretary, "the best pest and disease control and the most efficient production accomplish little when there are no markets"; and he stressed his awareness of Latin American cattlemen's interest in beef trade—particularly the future of U.S. beef imports.

"You can be sure of two things in this regard," he went on. "First, that the United States will continue to try to administer its laws regarding beef and veal imports in a manner that will be fair to its own industry and to its own consumers, and at the same time to permit its friends to share in the growth of the U.S. market for this meat. And second, you can be sure that this will continue to make some people unhappy."

The Secretary pointed out, however, that the problem has to be put in perspective, for the United States, while the world's largest exporter of agricultural products, is also an importer—second only to the European Common Market.

"How much we sell to the world is a key factor in how much we can buy from the world, and we have the same trade access problems as you," he told the Latin American cattlemen. "We are having trouble selling to the world. This is true in Japan, in the European Community, and I'm sorry to say, in Latin America itself. The past 2 years our agricultural exports have declined.

"As licensing systems, embargoes, prohibitive duties, and similar impediments have rendered other markets less attractive, the pressure has increased on the United States; but it seems to me that no one can justifiably expect one area of the world to take unlimited supplies when others are not prepared to do the same thing."

Reasons for voluntary restraint program

"With this situation in mind," said the Secretary, "we certainly must respect the right of our farmers to have a chance to earn a living, while at the same time we respect the principle of freer trade and the rules of fair play for other countries. This is why we have tried to strike a balance with a program of voluntary restraint levels, one that allows all suppliers to participate in the market growth that occurs in the United States. We believe that this is reasonable."

The Secretary reminded his audience that while the United States acted this year to bar meat imports from sources that went beyond the voluntary restraint level, it did redistribute shortfalls and increase allocations for some Latin American countries.

"Your trade with us has been growing—not only in agriculture generally, but in beef," he went on. "Suppliers, and this includes Mexico and the Central American countries, have steadily increased their shipments to our market in recent years. However, I must caution you that there are limitations to this as to any market, and this growth may not be of the size you would hope.

"There are something over 200 million mouths to be fed in the United States. There are 3-plus billion in the world—in countries developed, where consumers can buy today, and developing, where, I am hopeful, more and more consumers can buy tomorrow.

"There is actual and statistical evidence that as per capita incomes rise, people demand more and better food, particularly meat. As the so-called 'green revolution' stimulates production in developing countries, it also increases income, stimulating demand that may outstrip the ability to supply it on a local basis. I sincerely believe that the effective demand for food throughout the world will continue to expand, and that collectively we may look to growing world trade.

"Our job—the job for all of us, and one President Nixon has undertaken—is to work together to build a strong agriculture and a sound world trade. It won't be done today, or tomorrow. But it can be done.

"And let me repeat: We want to work with you, not around you. The President put it like this: 'It seems only fair that in the more balanced relationships that we seek, there should be full consultation within the Hemisphere family before decisions affecting its members are taken, not after.'

"This, it seems to me, is the spirit in which this Inter-American Confederation was organized. As long as that spirit continues, I think the cattle industry of the Americas will continue to progress."

The attaches report

Brazil Registers Gains in Agricultural Output

With production increases registered for all major crops except coffee, Brazil's Ministry of Finance technicians have calculated that 1969-70 agricultural output should be 8 percent greater than in the previous season if coffee is included and 10 percent if coffee is excluded.

A smaller coffee harvest is expected as a result of the freeze in north Paraná, but Brazil has ample stocks to fill export needs and meet internal demand. Coffee exports were valued at $586 million for the first 9 months of 1969, as compared with $603 million for the same period in 1968. In this year's total were soluble coffee exports of $27 million, compared with $17 million in the same period last year. Current high coffee prices are expected to encourage producers to use better cultural practices to increase productivity.

Record wheat crop

Large production increases are expected for cotton, beans, corn, soybeans, and wheat. A record 1 million metric tons of wheat is expected to be harvested by mid-December, bringing Brazil to about 33 percent of anticipated consumption requirements of wheat during 1970, compared with 23 percent in 1968-69. In previous years the self-sufficiency level has been about 10 percent. The greater supply this year comes at the expense of a large subsidy to domestic producers who receive a price about 60 percent higher than that given to U.S. farmers.

Cotton was Brazil's second largest export in the first 9 months of both 1968 and 1969, followed by iron ore and sugar. Cotton exports of 332,000 tons in 1969 were valued at $150 million, up 57 percent from the 178,000 tons valued at $95 million in 1968. The average price per ton for cotton dropped from $535 in 1968 to $452 in 1969.

Exports of sugar were up 10 percent in 1969. Exports for 1969 were valued at $90 million compared with $82 million during the first 9 months of 1968.

Cocoa beans and butter

An 83-percent increase in exports of cocoa beans and butter during the first 9 months of this year brought the value of exports of these commodities to $88 million. This increase was the result of a 35-percent gain in quantity and a substantial rise in unit prices. Cocoa beans were valued at $892 per ton in 1969, compared with $584 in 1968. Cocoa butter was valued at $1,877 per ton in 1969, compared with $1,390 in 1968.

The biggest percentage increase in export earnings for major agricultural commodities came from frozen and cooked beef which rose 89 percent, bringing the value to $51 million. This increase was primarily the result of a rise in quantity although prices were also somewhat better. Brazil exported 85,000 tons in the first 9 months of 1969 compared with 44,000 tons for the same period in 1968.

—Based on dispatch from JOHN C. MCDONALD
U.S. Agricultural Attaché, Rio de Janeiro

Canadian, Polish Wheat Accord

Canada and Poland have extended the terms of the 3-year long-term wheat agreement of July 26, 1966 until July 31, 1971. The letters prolonging the agreement were signed in Ottawa on October 31 by Jean-Luc Pepin, Canadian Minister of Industry, Trade and Commerce, and Dr. M. Karczmar, Trade Commissioner in Canada of the Polish People's Republic.

The original agreement provided for Polish purchases of 900,000 tons of Canadian wheat during a 3-year period ending November 5, 1969. Although Poland had purchased and received well over half of the agreed quantities of wheat from Canada, it was explained that for a variety of reasons it was not possible to complete the specified purchases and deliveries by November 5 of this year. Under the terms of the extended agreement, Poland is to complete purchases of the remaining 400,000 tons before July 31, 1971.

In addition, Poland will have the option of substituting purchases of barley for wheat to the extent of 50 percent of the remaining quantity. Purchases of 200,000 tons are to be made before July 31, 1970, and sales contracts have already been concluded for the shipment of 100,000 tons of barley and 70,000 tons of wheat, according to the office of the Honorable Otto Lang, Minister responsible for the Canadian Wheat Board.

The new arrangements were facilitated by credit terms provided for in the Canadian Wheat Board Act. The terms call for a 10-percent cash payment at the time of shipment, with the balance payable in equal installments at 24, 30, and 36 months. The deferred payment provision is made possible by a guarantee to the Canadian Wheat Board by the Government of Canada.

—Based on dispatch from ALFRED R. PERSI
Assistant U.S. Agricultural Attaché, Ottawa

IDA Loan to Ceylon

The International Development Association (IDA) has extended a credit equivalent to $2.5 million to Ceylon for drainage and flood control works which will help increase rice production on some 13,200 acres. The project is intended to increase the incomes of some 10,000 farmers, and improve Ceylon's balance of payments position through savings on rice imports.

The project being assisted by the IDA credit is part of the government's program to increase rice production. This program has met with considerable success in the last 2 or 3 years. Between 1962 and 1968 the acreage planted to rice has increased 13 percent and total production has risen 34 percent.

The works to be undertaken will be located in six noncontiguous areas along the southwestern coast, where agricultural production is now limited and uncertain because of poor drainage and frequent flooding. The project involves an improvement of drainage by deepening, enlarging, and extending the system; improvement of drainage outlets to the sea; and construction of levees.

A Survey of Argentina's Grain and Feed Situation

Wheat. The 1969-70 Argentine wheat crop is expected to be below normal for the second successive year primarily due to early season drought but with insect damage in some areas also a factor. A production of about 6,250,000 tons appears likely from a planted area of about 6,200,000 hectares.

The poor 1968-69 crop caused a tight supply situation which was only partially relieved by an above-normal carryover. As in 1967 Argentina had to import wheat in 1969 to supply domestic needs after export commitments were met. The Grain Board bought 365,000 tons from Russia, Australia, Mexico, and the United States. Purchases from the United States were 140,000 tons of Hard Winter No. 2. Imports may be necessary again in 1970 if the government continues its policy of supplying its usual South American export markets.

Exports of wheat in the 1968-69 marketing year are expected to total about 2.4 million tons (including 330,000-400,000 tons of durum), compared with 2.2 million in 1967-68. Major importing countries were Brazil, Italy, and Peru (chiefly durum to Italy).

Government authorities are reviewing the export taxes on grains in preparation for the new crops. The present export tax on wheat is 6 percent and on corn and grain sorghum 8 percent. If current low world prices continue, private shippers may have trouble in the export market for bread wheat if the tax is retained. In that case the wheat that is not utilized domestically would be delivered to the Grain Board under the support program. In view of the expected short supply, the government may decide that acquisition by the Board of surplus supplies is the best course and retain the export tax. The decision will probably be announced soon.

Export availabilities of wheat in 1969-70 will depend on the outcome of the present harvest, whether the government will try to increase carryover stocks, and whether there will be further imports. Considering the low beginning stock level, it seems probable that net exports will be less than the approximately 2 million tons of 1968-69.

Rye. Rye production is projected at about 450,000 tons. Although the drought in the north affected production, conditions elsewhere have been generally good.

Rice. The planting of the 1969-70 rice crop has just been completed and the unofficial projection is for a production of about 300,000 tons, compared with the record 1969 harvest of 345,000 tons.

Because of this year's bumper production domestic prices are at or below the level of a year ago. This makes an unfavorable market for the producers since general price levels have advanced by about 10 percent. Producers have asked the government to establish price supports for rice.

Exports of milled rice are expected to total 70,000 tons for the current marketing year (ending March 1970). Export demand is slow and sales difficult. About 17,000 tons were shipped from April through July and the trade hopes to market the 30,000 or so remaining tons available for export to Peru and Chile.

Corn. According to the first estimate of the Argentine Department of Agriculture, the area planted to corn for 1969-70, at 4.5 million hectares, is down 2 percent from last year. If this estimate holds it will be the first time in 5 years that area has not increased. The decline occurred largely in the fringe producing areas of the north and west and apparently was due to the dry weather which impeded seeding. However, area increased in the central corn zone where yields are normally higher, and higher average yield could offset the small decline in area. Based on present conditions and assuming average weather through the season a crop of 7 million tons is tentatively projected.

Grain sorghum. The area sown to grain sorghum for 1969-70 is officially estimated at 2.2 million hectares, slightly above last year's level. Sorghum is planted later than corn and it was less affected by the dry weather which tended to lower corn area. Sorghum acreage has increased each year since 1962-63 and is now more than double the level of that year. Production of sorghum is tentatively projected at 2.5 million metric tons. The rainfall since planting has been favorable and plant growth is good.

Strong demand for corn and sorghum moved these crops into export channels rapidly after the harvest. As of mid-November virtually all supplies available for export were committed. Trading is now mostly confined to new crop supplies which will not be available for shipment until March 1970. Corn exports for the marketing year (April-March) will be about 3.5 million tons. The record 1968-69 harvest of grain sorghum resulted in record exports of about 1,250,000 tons, mostly to Japan.

Barley and oats. The 1969-70 acreage for barley and oats is estimated to be lower than that of last year also due largely to weather factors. The harvest for grain of these dual-purpose crops depends partially on livestock grazing requirements. Production is unofficially estimated at 650,000 tons for barley and 550,000 for oats, both above the 1968-69 levels.

—Based on dispatch from JOSEPH C. DODSON
U.S. Agricultural Attaché, Buenos Aires

Outlook: Canadian Grain Trade

The Sixth Annual Review of the Economic Council of Canada, 1969, comments that international efforts to liberalize trade in agricultural products have made little progress and that trade in these products, including grains, remains distorted by restrictions and subsidization. Heavy production of wheat in many countries reduced trade, and a buildup of stocks has caused a very serious economic situation in the Prairie Provinces.

The Council anticipates but little growth in Canadian grain exports in the medium-term future. While prospects for feed grains are better than those for wheat, Canada's situation is still said to be complicated by a heavy emphasis on wheat production.

The Council calls for stress on international restraints on subsidized trade, closer tailoring of Canada's products to buyers' requirements, and shifts of agricultural resources, including manpower, to other uses.

CANADIAN GRAIN EXPORTS AS PERCENTAGE OF TOTAL WITH 1975 PROJECTION

Exports	1957	1966	1967	1968	1975
	Mil. U.S. dol.	*Mil. U.S. dol.*	*Mil. U.S. dol.*	*Mil. U.S. dol.*	*Mil. U.S. dol.*
Grains	497	1,124	827	736	833
Total	4,523	9,550	10,555	12,556	23,033
	Percent	*Percent*	*Percent*	*Percent*	*Percent*
Grains	11.0	11.8	7.8	5.9	3.6

In major coffee area

Colombian Farmers Urged to Vary Output

By EDMOND MISSIAEN
Foreign Regional Analysis Division
Economic Research Service

The need for diversifying agricultural production has long been recognized in many countries whose economies are largely dependent upon a single crop. On June 16 Foreign Agriculture *reported on Colombia's attempts to increase production of a number of crops that could either reduce dependence on coffee exports or displace certain imports. In another program—described here—Colombia is encouraging farmers in its major coffee-producing area to produce more crops and livestock products for sale on the local market.*

For 6 years now Colombia has been operating a pilot program aimed at diversifying agricultural production in an area where farmers have traditionally concentrated on producing coffee. Experience gained in implementing this program is currently being used to prepare a broader scheme for submission later this year to the International Coffee Agreement (ICA), which will be receiving such plans from member countries seeking assistance for diversification activities from its recently established Diversification Fund.

The area in question consists of the Departments of Caldas, Quindio, and Risaralda and the northern parts of Tolima and Valle del Cauca. With rich volcanic soil, a moderate climate, and a steep terrain, it is ideally suited to the perennial coffee plant and accounts for about 55 percent of the country's entire coffee output. The high unit value of the crop compensates for the cost of transporting it out of the area. However, only about 20 percent of the area's farmland is in coffee even though this crop accounts for about 60 percent of its agricultural income. This is because coffee grows best on the land between 1,000 and 2,000 meters in altitude, while much of the area's farmland is below or above this zone.

To round out local economy

The primary objective of the pilot diversification program is to round out the agricultural economy of the area and increase the incomes of its individual farmers through production of crops and livestock products for sale on the local market. This would lower dependence upon coffee—with its fluctuating prices—for income and, at the same time, provide food products needed by the local population. It would also make more efficient use of family labor by spreading it more evenly through the year. The main obstacles to the program are the mountainous terrain, which restricts production of field crops and hinders farm-to-market transportation, and the prevalence of small farms, which limits the number and type of diversification activities that can be introduced.

The pilot program has been planned, organized, and coordinated by the Coffee Zone Development and Diversification Fund, established July 1, 1963. The Fund is an autonomous regional organization whose board of directors consists of the general managers of five Colombian agencies involved in agricultural development: The National Federation of Coffee Growers, the Coffee Growers' Bank, the National Agricultural Credit Bank (Caja Agraria), the Colombian Agrarian Reform Institute (INCORA), and the Caldas Finance Corporation. The Fund does not execute programs. This is handled by various national entities—those represented on the board of directors and others.

Despite the emphasis on diversification, the Fund has not advocated the removal of coffee trees. Rather, it has promoted improvement of yields on existing trees. Diversification is meant to be supplementary to coffee production. In terms of improving farmer income, the most successful diversification activities have been cattle and hog raising, dairying, and chicken farming. Fruit and vegetable growing and the cultivation of cocoa are also expected to have potential as diversification activities.

Plans and projects

Farm credit, technical assistance, and market development are believed to be essential to the success of the program. Original plans called for such projects as agricultural loans, farmer training, animal breeding centers, crop experimentation, marketing, rural infrastructure, social assistance, agrarian reform, forest development, foreign technical assistance, and industrial promotion. Not all these projects were implemented with equal vigor. Animal breeding centers and agrarian reform programs were never initiated. On the other hand, rural credit has received strong emphasis and has proved the most successful part of the program.

The stated objective of the credit program is to unite and coordinate the efforts of the participating organizations in their search for a more effective system of agricultural credit and technical assistance. Resources invested in this program amount to $11.1 million, of which 37 percent is provided by the participating Colombian organizations, and the remainder is a loan from the Inter-American Development Bank. (Dollars are converted to pesos at a fixed rate of 12 pesos to the dollar; the current rate is about 17.5 pesos.) Additional loan funds are made available through a rotary fund into which loan repayments are invested. As of June 30, 1969, 7,908 loans totaling $18.5 million had been contracted, and $14.8 million had actually been disbursed.

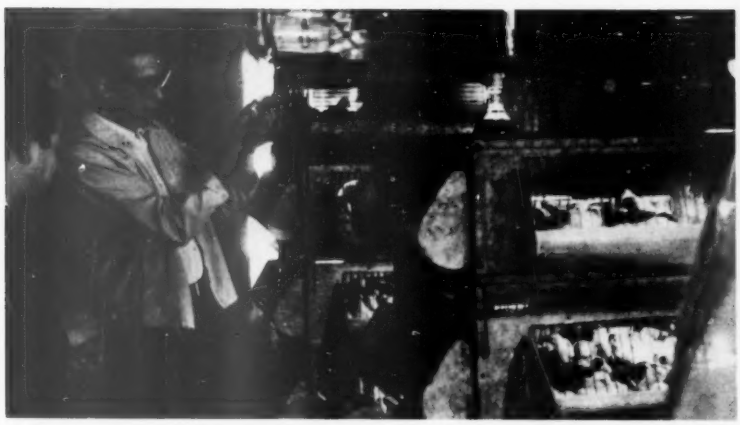
Through June, the largest amount of money had been granted for cattle and hog raising, which accounted for 43 percent of the total. Much of the remaining disbursements went for coffee-tree improvement (18 percent), dairying (13 percent), and poultry farming (8 percent). Other enterprises for which farmers received loans include plantains, sugarcane, other food and fiber crops, and farm machinery. The greatest number of loans had been made for coffee improvement (30 percent). Twenty-three percent were for cattle and hogs, and 18 percent, for plantains.

Credit terms

The average size of the loans, through June, was $2,340. Terms of credit vary from 1 to 20 years, depending upon the activity being financed. The livestock and poultry loans have been made for terms of 3 to 8 years.

The credits are granted for one or more specific projects within a farmer's operation. They often finance a farmer's

Clockwise from left: Farmer prepares to spray dairy cattle; small dairy farm on typically rugged terrain in Colombia's major coffee area; Holstein cattle on same farm; inspecting recently hatched chicks.



principal market activity. More than 140 technicians, most from the Coffee Growers' Federation, assist participants in the management of projects financed by the loans.

Participants in the credit program are chosen for their ability and their interest in the program. Generally, credits are limited to farmers operating properties of 5 to 20 hectares (12 to 50 acres) in area. According to the directors of the program, these farms have the greatest potential for successful development and diversification. However, the size limitation precludes participation of about half of the area's farms, which are smaller than 5 hectares. Farms larger than 20 hectares, many of which contain a large proportion of poor land, are not included because their owners are thought to be principally part-time farmers who do not depend solely upon their land for income.

The pilot program also has sponsored a school lunch program, industrial development, marketing research, an adult education center, and a reforestation plan. The school lunch program is carried out in cooperation with the World Food Program of the Food and Agriculture Organization. Its objectives are to encourage increased school attendance, improve students' diets, and provide a market for agricultural diversification products. Under the industrial program, fruit canning and meat processing enterprises are being established to provide both jobs and markets for agricultural raw materials.

One of the most notable achievements to date has been the coordination of various agricultural development plans. For example, before the program was initiated, there existed several unrelated plans for building rural roads. Now, the various entities constructing the roads are adhering to a master plan for rational development. The importance of a coordinated roadbuilding program is underscored by the need for good, inexpensive transport if diversification products—particularly perishable ones—are to be marketed successfully.

The pilot program was originally intended as a 5-year scheme. However, it will most likely continue to operate until a successor organization is formed to carry out the new program being submitted to the ICA. The new program will propose maintaining present coffee production from fewer trees and will concentrate heavily on forming a marketing system for diversification products.

Two recent dispatches from Attache **Harold C. Champeau** *in Warsaw delve into the effects of Poland's 1969 drought and examine Polish agricultural organization in relation to production.*

Diminished by Drought: Poland's 1969 Harvest

As was projected during the drought-ridden summer of 1969, the 1969-70 harvest of all crops in Poland is down from the record levels of 1968-69 (see *Foreign Agriculture*, Sept. 15, 1969, and Nov. 3, 1969). However, the pessimism about crop yields expressed in official quarters during the last stages of the drought appears to have been more justified with respect to forage crops and potatoes than with respect to grain.

Revised estimates indicate that grain production will be about 1 million metric tons below 1968 which was a record year. Probably about 12 million tons of forage crops and grasses for winter feeding were lost because of the drought. In addition, there are estimated losses of 10 million tons of potatoes, and the sugarbeet crop—tops and pulp of which are used for feed—is expected to be small. With the record number of livestock recorded in June 1969, there is the beginning of what appears to be a very serious feed shortage.

Remedial measures have been instituted by the government to reduce exports of some agricultural and food products and increase imports of others. In spite of these and other measures, however, the feed shortage will probably cause serious problems in the livestock sector, including reduced milk yields and premature selling or slaughtering of livestock in feed-deficit areas. This will probably be much more evident in the early spring of 1970 than now.

1969 grain crop estimates

Compensatory sowing of wheat and barley in the spring added considerably to the area sown to grain, thus increasing the area harvested and in part compensating for lower unit-yields. Poland's total 1969 grain harvest on about 8.62 million hectares (1 hectare = 2,471 acres) is expected to reach approximately 17.0 million to 17.2 million metric tons—which compares favorably with pre-1968 levels of output—with average yields of about 19.8 quintals per hectare.

The four major grains—rye, wheat, oats, and barley, in that order—were harvested on about 8.26 million hectares, producing an estimated 16.5 million to 16.7 million tons, with average yields of approximately 20.0 quintals per hectare, compared with 21.4 quintals in 1968.

Production of both total grains and of the four major grains is expected to be approximately 1 million tons below the record levels of 1968 for each. Rye is expected to have maintained its usual share of 50 percent of the major grains' total production and wheat is expected to account for around 26-27 percent. Wheat's share of total production has been increasing constantly from about 22 percent in 1965 to over 26 percent in 1966. Winter wheat was about 87 percent of total in 1965-68 and 89 percent in 1968.

Both area and yield percentage losses for the spring grains are believed to be higher than for winter grains. Oats probably decreased the most: oats' share of the four grains' harvest will probably be only 14-15 percent in 1969, compared with an average of about 17 percent in 1965-68. Barley acreage was expanded in 1969 as a catch crop for the damaged winter rape and also in response to an increase in state purchase prices for barley. Barley's share of the four grains' harvest in 1969 is expected to be about the same as in recent years, approximately 9 percent.

Feed

Poland's expanding livestock sector depends heavily on grain for feed. It also requires great quantities of forage feeds. Yields in 1969 in the forage feed sector are below those of 1968. Hay losses are estimated to be as high as 3 million tons. It is doubtful if pastures provided more than half of their usual 5 million to 6 million tons of grazing forage. And, losses of catch crops—almost a total loss over much of northern Poland—are estimated to be as high as 5 million tons. Fodder root crops are around 10 to 15 percent lower than in 1968, a loss of about 1 million tons. Thus, there is a projected shortfall of up to 12 million tons of basic feed crops not including the diminished potato, sugarbeet, or grain crops.

Potatoes and sugarbeets are also major sources of feed in Poland. More than 50 percent of the total potato crop is used for feed—some 70 to 80 percent of that for hogs, nearly half of the total feed requirement of hogs. The 1969 potato crop is estimated to be only 38 million to 40 million tons, compared with 50.8 million in 1968. Unit yields are believed to have dropped more than 20 percent from 185 quintals per hectare to about 140 quintals. The drought has also caused a reduction in the average size of potatoes and projected high losses during storage this winter because of lowered resistance to spoilage. Storage losses already average 10 to 15 percent annually; the higher percentage factor for losses applied against the sharply reduced base is serious when viewed in the light of the increased food and feed requirements in 1969-70.

Although sugarbeets were also hard hit by the summer drought, they are harvested later than potatoes and so recovered to some degree because of timely rains during their later vegetation period. The harvest was started even later than usual but proceeded satisfactorily. Area sown in 1969 to sugarbeets was about the same as 1968, but production is estimated at only 13.0 million to 13.2 million tons, 11 to 12 percent below 1968. Although early estimates indicate a higher sugar content from smaller sized beets, only 12.5 million tons are expected to be processed, a decrease of 12.2 percent. Sugarbeet production in 1968 was 14.8 million tons, of which 14.2 tons were processed.

Livestock and feed

The number of cattle and also hogs increased from June 1968 to June 1969. Although highly desirable in itself, this increase has exacerbated the tight feed situation. Cattle numbers increased by 1.0 percent to 11.1 million head, of which cows increased by 0.9 percent to 6.25 million head. Hogs increased even more, by 3.2 percent to 14.4 million head, a record for June censuses. The slight decrease in num-

ber of sheep—2.7 percent—and horses—1.5 percent—has done little to alleviate the increased competition for scarce feeds.

Because of the drought, milk yields per cow decreased somewhat. However, since 1967 the dairy industry has been able to process only about one-third of total raw milk, volume of which has exceeded 14 billion liters.

State purchase and market supply

In July and August, state purchase of barley and oats was 116.8 and 45.1 percent ahead respectively of the same period in 1968, purchase of rye was 9.9 percent behind, and wheat stayed the same. The purchase of livestock has run ahead of 1968, milk, behind. There was also heavier purchasing of cattle,—up 10.4 percent—and meat-lard hogs—up 11.3.

While exports of fresh-frozen meat more than doubled during July and August and egg exports increased by 76.3 percent, most other exports of agricultural and food products were down, including poultry by 71.2 percent, butter by 67.0 percent, and bacon, canned hams, and canned meats by moderate amounts. And, to further meet market demands there will probably be sharply increased imports of wheat and citrus fruit, moderately increased imports of rice, and animal and vegetable fats and oils, but decreased imports of meat and barley.

In addition to the measures mentioned above—reducing exports and increasing imports—the Polish Government has taken many other steps to provide general assistance to farmers to maintain livestock numbers, and to provide food for the people. Among the more important are the following:

1. Extending the higher purchase prices for young cattle from June and July, when supplies are usually lowest.
2. Newspaper campaigns advising farmers how to make the most of available materials such as leaves, straw, and other crop roughages and wastes, especially for feed.
3. Increased supplies of fertilizers to help reduce drought losses.
4. Permitting cattle to graze in forests, public grounds, and other nonagricultural areas.
5. Increased supplies of industrial feed concentrates for farmers.
6. Reduction of starch and alcohol production to divert approximately 700,000 tons of potatoes to feed.
7. 12-month postponement on agricultural credit repayment.
8. Additional credits to farmers to purchase fertilizer and certified seed.
9. Expansion of milk purchasing to areas formerly considered to be marginal supply areas.
10. Increased use of groats, macaroni, and other potato substitutes in restaurants.
11. Transport of livestock to areas with adequate feed supplies (Bialystok, Lublin, Rzeszów, and Kraków).
12. "Intervention purchasing" to prevent excessive slaughter of young livestock for further fattening.
13. Higher state purchase prices for hogs to begin January 1, 1970, to prevent excessive slaughtering in the last months of 1969.

A Look at the Structure of Polish Agriculture

The major agricultural policy of the Gomulka regime of Poland has been to increase crop production through increased unit yields. Notable success has been achieved with wheat, although the area sown to wheat has also been gradually enlarged. Wheat production increased from 2.3 million metric tons in 1960 to 4.6 million tons in 1968. Total production of the four major grains (rye, wheat, oats, and barley) increased also from 14.3 million tons in 1960 to 17.6 million tons in 1968, a record year. Gains were also made in rapeseed —the major domestic source of vegetable oil—potatoes, sugarbeets, and fruits and vegetables.

In spite of such progress—which was greatly aided by four consecutive years, 1965-68, of favorable weather conditions —Poland remains chronically unable to meet its domestic requirements for wheat, feedgrains, fibers, vegetable oils, and several other agricultural commodities. As a result, to meet constantly increasing food and feed requirements it has been necessary for Poland to import large quantities of wheat and feedgrains. However, production has been catching up with consumption, and so the need for these imports is declining.

Rise and fall of collectivization

Poland has long had low agricultural production for its extent of arable land. About 15.7 million hectares, nearly half of Poland's total land area, is arable (1 hectare = 2.471 acres). The main reason for this is the large number of private farms which from World War II to the end of the 1950's—because of the structure of the Polish agricultural sector—were largely ignored and very little invested in. Also, the private farmers themselves have been very insecure about their farms, not knowing how long they would be able to keep them private, and so they have not invested in them either.

Until late 1956, the major goal for Polish farms was "collectivization" in line with current Communist policy. Although some progress was made in this direction, by September 1956 there were still only 10,510 cooperative farms on only 8 percent of the total arable land. In October 1956, a new Politburo committed to the development of Polish Communism less rigidly under Russian control was elected. And, Secretary Gomulka permitted the dissolution of cooperative farms. By 1957, only 1,803 cooperative farms remained; and by the end of 1968, the number had dwindled to 1,123 on only 1.2 percent of the total arable land.

After the all-but-total collapse of the collective-farm sector, the only important socialized agriculture remaining was the state farm. Under collectivization, farmers organize themselves and divide the portion of the profits remaining after fulfilling responsibilities to the government. However, on the state farm the government directly manages and all profits go directly to the government which then pays wages to the farmers. The state farm sector also shrank after the events of 1956 at which time there were 6,990 state farms. It operated at a deficit until 2 years ago and is still having problems with management, equipment, and personnel. In 1968, under the Ministry of Agriculture, there were 5,792 state farms on 13.7 percent of the total arable land.

Current policy is to enlarge the state farm sector through

consolidation or addition, by means of confiscation of inefficient farms, appropriation of abandoned land, and land received in exchange for pensions. The size of state farms is becoming larger and will probably continue to grow at a rather modest rate. While the size of this sector is being expanded, the number of farms in it is being reduced. As a result, the average size of state farms increased from 524 hectares in 1967 to 566 hectares in 1968.

Nevertheless, the state farm sector remains small. And, although state farms are receiving more attention and more investment, the lack of skilled managerial personnel and production technicians is inhibiting effective development.

The private farm sector

Once "decollectivization" was permitted, the private farm sector quickly became important. By 1960, there were 3,591,000 private farms on 84.7 percent of the total arable land. The average size of the private farm is 6.33 hectares, varying from region to region with smaller farms in the south and larger farms in the west, north, and northeast. Private farms of greater than 15 hectares—20 hectares on farms raising livestock—may not now be acquired. Older farms, however, may be as large as 50 hectares in eastern Poland and 100 hectares in the west and north (former German territory).

These private farms are often small and fragmented and on very poor soil. Fragmentation has become an increasingly serious problem because it leads both to area wasted in boundaries and paths and to time wasted because of "commuting" between fragments. In some areas fragmentation has prevented the use of mechanical equipment for field work —where such equipment has been available.

Also, young people are abandoning farms leaving them to the old people who either are no longer able to farm efficiently or want to stop farming altogether. This lack of effective manpower has been increasingly frustrating to a regime whose major agricultural policy is "production" almost at all costs.

In an attempt to solve these problems, three new land laws were passed in January 1968 (see *Foreign Agriculture*, May 27, 1968). The first of these laws allocates pensions and other compensations to aged farmers who voluntarily transfer their farms to qualified private farmers or to the state. The second legalizes the compulsory sale of neglected or misused farmland. And, the third provides for the consolidation of small, scattered, privately owned farms. Under this third law, approximately 225,000 hectares were consolidated or exchanged in 1968 and an additional 340,000 hectares are planned for consolidation in 1969.

Another problem that eventually must be faced is the widespread dependence in the agricultural sector on the horse. Especially on private farms—where 96 percent of Poland's 2.67 million horses are—the horse is used in plowing, cultivating, harvesting, and in the transport of crops, livestock, consumer goods, and people.

Maintaining this large horse population is very costly. It has been estimated that in the fiscal year 1967-68, approximately 1.95 million hectares of agricultural land—about 10 percent of the total—were used to raise feed for horses. Horses consume about one-third of the grain crop—oats, rye, barley, and wheat, in that order—about the same amount as hogs and approximately four times as much as cattle. In addition, it has been estimated that for every horse eliminated, 300 kilograms (660 pounds) of beef cattle could be produced. And finally, the large number of horses results in expenditure of foreign exchange to import grain for feed.

However, thus far, these expenses have not been sufficient to elicit the capital—domestic and foreign—which would be required to replace horses with mechanical power and to alter radically the traditional way of life of the great majority of farmers.

The future of the private farm

Many private farmers are better off economically and have more freedom of action even considering the problems of the private sector than their counterparts on the state farms or urban workers. Those farmers supplying flowers and fruits and vegetables to urban centers are especially well off. Much new farmhouse construction can be seen in such agricultural areas.

While private farmers are required to pay land taxes and to make deliveries at fixed prices, both based on the quality of their soil and the size of their farms, the delivery requirements have been gradually reduced and now include only moderate quantities of grain, livestock, and potatoes; farmers with very small farms are totally exempt. And, farmers may sell the rest of their harvest or livestock under contract—which, although still fixed by the government, is at higher prices—or in the flourishing free market.

Since there are very limited possibilities for any major expansion in the small socialized sector—except through coercion, since the private farm is preferred by most of the farmers in Poland—the private sector is now receiving much aid—fertilizer, plant protection chemicals, better seed, and more services in the areas of mechanization, crop production, livestock production, and credit. With such support, the private arms are improving and becoming stronger, and Poland's agricultural production should increase.

New Ethiopian Sugar Factory

The new Metahara Sugar Estate and Factory, Ethiopia's third complex of this type, was inaugurated on November 6, 1969, at Metahara in the Awash Valley. Developed and constructed by the Dutch-controlled firm, H.V.A. Ethiopia, which is the managing agent and 51-percent shareholder, the Metahara Sugar Estate is the largest and most modern in Ethiopia.

Initial production from the plant has been set at 29,000 metric tons per year, but production can be increased to 65,000 tons when needed. Ethiopian sugar production from the three sugar estates, Wonji, Shoa, and Metahara, is expected to reach 96,000 tons next year. This would be an excess of about 15,000 tons above local consumption, an amount which would be available for export.

The Metahara Sugar Complex is said to be one of the most significant agro-industrial developments in the rich Awash Valley. Of the 27,000 acres given under concession to H.V.A. in 1965, about 25 percent has been planted in cane and another 25 percent used for worker housing, schools, and a medical clinic. Although there has been a significant rise in sugar consumption in Ethiopia (from 15,000 tons in 1954 to 75,000 tons in 1968), the per capita consumption of 3½ kilograms (7.7 pounds) is only about one-third of the African average.

Third in a series

Highlights of the Agricultural Trade of Kenya

Throughout the 1960's, the list of Kenya's major foreign trading partners has remained essentially unchanged. The United Kingdom, Uganda, and Tanzania have received the principal share of Kenya's total exports. They accounted for close to 50 percent of the total up to 1967, increased to about 71 percent in 1968. West Germany and the United States are Kenya's next most important customers—U.S. share of total exports has averaged about 8 percent over the years.

The origin of Kenya's imports has also remained relatively stable, with the United Kingdom continuing as Kenya's No. 1 supplier. Other important suppliers include West Germany, Uganda, Iran, and Japan. The United States is usually in fifth or sixth place; however, unusually large—167,000 metric tons—imports of U.S. corn under Public Law 480 put the United States in second place for 1966.

Since 1965 Kenya has changed from a net grain importer to a net grain exporter. Kenya's corn production—increased because of adapted hybrid varieties, improved cultural practices, and expanded acreage—is credited with this change. In 1965 corn imports were 197,000 tons, and in 1968 corn exports totaled 210,000 tons. Wheat, sorghum, and millet production have also been increasing since 1965. Wheat output has risen from 133,000 tons in 1965 to 227,000 tons in 1968. Much of the increase can be attributed to expanded acreage and favorable weather.

Kenya's leading export and main cash crop is coffee. About 38,000 tons were exported in 1968, a 26-percent drop—the result of coffee berry disease in 1967—from exports in 1967. Coffee production, however, is recovering and 1969 export tonnages will reflect the increased production.

Tea is also an important export crop; tea production reached an alltime high of 30,000 tons in 1968. The government is promoting tea as a cash crop for subsistence farmers.

Principal agricultural products imported from Kenya by the United States are coffee, tea, and pyrethrum. The United States has taken between 10 and 13 percent of Kenya's agricultural exports since 1965. In 1968 the total value of U.S. agricultural imports from Kenya was $17.5 million.

U.S. agricultural exports to Kenya rose from $1.0 million, 3 percent of the market, in 1964, to $11.3 million, 22 percent, in 1966. This rise was caused by a sharp increase in U.S. corn exports to Kenya under P.L. 480 in 1965 and 1966 to meet emergency food needs in that country. U.S. exports to Kenya have since fallen to $1.7 million in 1967 and $1.2 million in 1968. U.S. agricultural items exported to Kenya are primarily grains, dairy products, tobacco, and soybean oil.

SELECTED AGRICULTURAL EXPORTS FROM KENYA

Commodity and country of destination	Average 1959-61	1966	1967	1968
	1,000 dol.	*1,000 dol.*	*1,000 dol.*	*1,000 dol.*
Coffee	29,362	52,691	44,030	35,941
West Germany	15,611	19,009	11,945	13,923
Sweden	728	4,614	5,556	4,230
United States	3,941	8,465	3,805	4,121
United Kingdom	3,396	4,329	4,844	3,373
Finland	—	1,772	2,529	2,500
Netherlands	736	5,044	2,515	2,136
Tea	12,684	24,399	22,034	29,085
United Kingdom	6,537	15,681	13,671	18,570
United States	1,592	2,052	2,071	3,290
Canada	683	1,860	1,451	1,944
China (Mainland)	—	1,072	1,155	—
Uganda and Tanzania	1,401	—	1,068	—
Netherlands	192	1,469	778	1,257
Pyrethrum extract	5,744	6,711	6,784	7,012
United States	3,255	2,936	2,222	1,934
United Kingdom	1,083	789	1,180	1,479
Italy	357	975	887	1,063
Corn	1,020	—	3,987	13,585
United Kingdom	—	—	3,028	4,914
Netherlands	—	—	—	2,234
France	—	—	—	1,699
Japan	—	—	716	1,337
Wheat	2,009	2,707	4,487	4,471
Uganda	2,009	2,330	2,291	2,206
Tanzania		377	2,196	2,214
Cotton	1,989	2,433	1,761	1,115
China (Mainland)	95	404	779	502
West Germany	723	570	206	398
Japan	577	1,082	—	—
Canned pineapple	1,346	1,498	1,526	1,381
United Kingdom	903	1,091	1,224	846
Sisal	11,403	9,352	5,780	5,130
France	396	524	391	672
United Kingdom	2,234	1,413	918	552
Japan	1,158	702	479	518
Australia	246	616	480	445
Netherlands	433	1,011	419	—
China (Mainland)	393	401	437	430
Other agricultural exports	34,659	44,397	35,280	36,746
Total farm exports	100,216	144,170	125,669	134,466
Total exports	136,113	246,947	223,150	235,560

Source: Annual Trade Reports of Tanzania, Uganda, and Kenya.

SELECTED AGRICULTURAL IMPORTS OF KENYA

Commodity and country of origin	Average 1959-61	1966	1967	1968
	1,000 dol.	*1,000 dol.*	*1,000 dol.*	*1,000 dol.*
Tobacco	3,050	2,432	3,548	1,923
United States	135	303	65	77
Uganda and Tanzania	2,505	2,125	3,435	1,792
Vegetable oils	2,704	5,791	4,377	5,287
Uganda and Tanzania	2,188	2,860	3,205	[1] 1,920
Malaysia	—	1,863	857	1,289
United States	—	560	—	131
Grains and preparations	5,713	14,639	2,068	2,978
United States	1,119	12,104	434	545
United Kingdom	456	575	684	—
Dairy products	1,137	8,947	1,180	540
United States	29	937	635	154
Sugar, honey, and sirup	6,814	8,544	4,999	5,581
Uganda	3,354	616	3,477	3,706
United States	—	5	7	—
South Africa	824	1,145	—	—
United Kingdom	2,162	331	337	316
Yugoslavia	—	4,271	576	1,191
Other agricultural imports	11,590	10,079	16,636	16,084
Total farm imports	31,008	50,432	32,808	32,393
Total imports	251,950	345,854	336,138	355,897

[1] Uganda only.

Source: Annual Trade Reports of Tanzania, Uganda, and Kenya.

—FRED DEGIORGIO

Foreign Regional Analysis Division, ERS

Book review—

Changing Primitive Cultivation to Modern Farming

Can primitive farming be modernized? by F. Jurion and J. Henry, INÉAC, Brussels, Hors serie 1969.

This remarkable book, a translation from a 1967 publication in French, deserves its striking title. Everyone involved with helping technically primitive people develop farming and other sectors of agriculture in the humid and wet-dry tropics will surely want to see and read the book. Its examples are from central Africa, but its findings can in some degree be applied to regions of similar ecology and climate in South America and Southeast Asia. The authors, altogether too modestly, claim that "those... engaged on research and extension will save some trouble, and perhaps avoid some errors, if they make discriminating use of the findings of research and practical application carried out over several decades in a variety of biological settings."

Those who are primarily interested in the effects on world trade of agricultural programs in less-developed countries will also find helpful information.

The 457-page book, with a liberal selection of photographs, can be obtained in the English version by writing to INÉAC, 1 rue Defacqz, Brussels, Belgium. The price is BF1,000, or approximately US$20.

Can Primitive Farming Be Modernized? is the story of the great scientific effort to improve farming in central Africa by l'Institute national pour l'étude agronomique du Congo (INÉAC). The organization was founded in 1933 with a large station in the heart of the Belgian Congo; it gradually grew to include 46 experimental stations and to conduct a large number of field trials away from stations. Experimental sites were not only in the Congo (Kinshasa) but also in Rwanda and Burundi.

Research was carried out on a wide variety of soils and under many different bioclimatic conditions; and work was done with people who, though technically primitive, had contrasting cultures.

Some of INÉAC's research was directed, with dramatic results, toward improving plantation crops, such as the African oil palm, that would provide agricultural exports and therefore foreign exchange. But most of the work was directed toward improving the farming done by indigenous people—both to increase food supplies and to encourage production for market.

When INÉAC began its work nearly all farming in the Congo was in the form of shifting cultivation. As one of its first steps, INÉAC tried to find out how to make this seemingly haphazard way of growing food more productive. Some ways were found. In fact, INÉAC found ways for substituting continuous cropping systems for shifting cultivation altogether, but not on all soils nor under all social and economic conditions.

Simply knowing how to increase yields of old crops, how to grow new crops, and how to get more from livestock is not enough to bring about real improvements in agriculturally primitive areas. The authors stress that advances must be introduced in successive stages, each carefully gaged to be within the local cultivator's capacity to adopt and in harmony with his way of life.

Financing, inputs, marketing arrangements, and other services appropriate to the cultivator's stage of farming also must be introduced at the right time.

Finally, the combinations of improved practices and new inputs and services must be tailored to the local cultivators, soils, and climates. To know soils, climates, plants, animals, and insects is important; but to understand and be able to communicate with the people is vital.

The authors tell about the cropping systems, fertilizers, and tillage methods tried in enough detail so that readers can get a good notion about what succeeded and what failed in various conditions and why. Detailed data are given in appendixes on local kinds of soils and bioclimatic conditions.

Also included in the appendixes are generalized helpful tables. One shows the correlation of the soil names used by the authors with soil names of the French system and the U.S. Department of Agriculture classification system. Another relates bioclimatic designations used by the authors to those put forward by J. Phillips in his *Agriculture and Ecology in Africa.*[1] The book, however, would be easier to use if it had an index.

Can primitive farming be modernized? The authors do not give a straightforward "yes." They seem to say, "Yes, but modernization is neither easy nor instant."

—ARNOLD C. ORVEDAL
Soil Survey Interpretations
Soil Conservation Service

[1] *Agriculture and Ecology in Africa: A study of actual and potential development south of the Sahara,* by J. Phillips, Faber and Faber, London, 1959.

Weather Prevents Record Rice Crop in Mexico

Because of drought in the north and too much rain in the south, Mexico's rice crop for 1969 is estimated at about 330,000 metric tons—down more than 25 percent from last year's output of 455,000 tons in spite of increased acreage and advanced technology. If 1969 weather had not been particularly adverse, Mexico would undoubtedly have had a record rice crop.

Area planted to rice in 1969 was 432,000 acres compared with 420,000 acres in 1968. Use of improved rice varieties, more fertilizer, and other technological advances would have increased yields, too, if the weather had cooperated.

Weather conditions permitting in 1970, Mexico should achieve rice production in excess of 1969 expectations. In Sinaloa yields are expected to improve because of increased use of short-straw rice. The Isthmus of Tehuantepec, a relatively new rice-growing area in Mexico, is expected to increase acreage to about 3,700 acres. Technicians from Taiwan are working in Tabasco teaching techniques of growing rice under tropical conditions. Looking further ahead, Chiapas is installing irrigation to permit rice growing by 1972.

In general, both the quantity and quality of rice produced in Mexico should increase at a rather rapid rate the next few years. So far, all of Mexico's output each year has been consumed domestically or found foreign markets.

Rice, while still a minor Mexican agricultural export, is one of growing importance. Until a few years ago Mexico was a net rice importer. Exports for 1969 are expected to total 42,000 tons.

—Based on a dispatch from
WILLIAM L. RODMAN
U.S. Agricultural Attaché, Mexico City

U.S. Cotton a Hit at Belgrade Fair

Above, Maid of Cotton Cathy Muirhead arrives in Belgrade to attend Fair; left, fairgoers crowd into U.S. cotton exhibit.

The spotlight was on U.S. cotton at the International Textile Fair, "Fashion in the World" which was held at Belgrade, Yugoslavia, last month. The United States' debut at the fair took the form of a double-headed cotton promotion—an exhibit booth and appearances by Miss Cathryn Muirhead, the 1969 Maid of Cotton.

A half-million people from 19 counties reportedly toured the large exhibition hall and while there visited the attractive U.S. booth which featured a wide range of qualities of U.S. cotton available to the Yugoslav market, as well as other technical and promotional cotton displays.

Appearances by the Maid of Cotton did much to draw attention to U.S. cotton. Miss Muirhead was enthusiastically received by the press at her own news conference, by fairgoers, and by members of the cotton and textile community and fashion leaders at a reception hosted by U.S. Ambassador Leonhart.

At her own fashion show Miss Muirhead and several Yugoslav models appeared in 45 outfits made of cotton before an audience of 4,500. She also participated in Yugoslav fashion shows and visited a leading Belgrade cotton mill and a well-known clothing firm.

Top leaders in the Yugoslav cotton business, including government and trade officials and textile mill directors, attended a luncheon given by the U.S. Agricultural Attaché where they had a chance to talk with representatives from Cotton Council International and the USDA—who cooperatively sponsored the cotton promotion project.

The market development project was planned in an effort to keep U.S. cotton in the forefront of the Yugoslav market. Yugoslavia has been a market for the U.S. product for many years. Formerly a P.L. 480 program recipient, Yugoslavia now is a commercial market for cotton. Last year imports of U.S. cotton were valued at $8.4 million. Yugoslav mills like the quality, choice, and year-round availability of U.S. cotton.

—FRANK W. EHMAN
U.S. Agricultural Attaché, Belgrade

Silver Platter for Ecuadoran Bull

A 5-year-old Brahman owned by the San Carlos Sugar Company was selected as the Grand Champion Bull of Beef Breeds at the 25th Annual Agricultural Fair held at Guayaquil, Ecuador, in October.

The Judge, Roy Henry, Field Director of the Santa Gertrudis Breeders International, also chose the Grand Champion Cow of Beef Breeds, a Santa Gertrudis animal from Los Alamos, a ranch located in El Oro Province.

A major event of the fair was the presentation of trophies, including a silver platter for the Champion Bull awarded to Agustin Febres Cordero, Manager of the San Carlos Sugar Company. Participating in this year's presentation were the President of Ecuador, Dr. Velasco Ibarra; the Minister of Agriculture, Dr. Angel Duarte; and the President of Ecuador's Coastal Livestock Association (the group that sponsored the show), Atilio Descalzi.

Practically all of Ecuador's purebred cattle are descended from stock imported from the United States. U.S. cattle exports to Ecuador jumped from 175 head in 1967 to 482 in 1968. In 1969 shipments may be reduced somewhat.

Attaché Bill Bowser, left, presents trophy for champion bull to Mr. Agustin Febres Cordero. Looking on are Dr. Velasco Ibarra, President of Ecuador, and Mr. Descalzi.

CROPS AND MARKETS SHORTS

Weekly Report on Rotterdam Grain Prices

Current prices for imported grain at Rotterdam, the Netherlands, compared with a week earlier and a year ago, are:

Item	Dec. 2	Change from previous week	A year ago
	Dol. per bu.	*Cents per bu.*	*Dol. per bu.*
Wheat:			
Canadian No. 2 Manitoba	1.93	0	2.02
USSR SKS-14	1.78	0	1.97
Australian Prime Hard	(1)	(1)	(1)
U.S. No. 2 Dark Northern Spring:			
14 percent	1.86	+1	1.93
15 percent	1.93	+2	1.99
U.S. No. 2 Hard Winter:			
13.5 percent	1.76	+3	1.89
Argentine	1.73	(1)	1.76
U.S. No. 2 Soft Red Winter	1.57	+2	1.79
Feedgrains:			
U.S. No. 3 Yellow corn	1.46	+3	1.39
Argentine Plate corn	1.84	+6	1.50
U.S. No. 2 sorghum	1.40	−6	1.36
Argentine-Granifero	1.47	0	1.38
Soybeans:			
U.S. No. 2 Yellow	2.73	−1	3.02

[1] Not quoted.
Note: All quoted c.i.f. Rotterdam for 30- to 60-day delivery.

French Canned Fruit Pack

Unfavorable weather conditions have reduced 1969 French deciduous fruit production and severely cut the canned apricot and cherry packs. Production of canned apricots is estimated at 60,000 cases, 24/2½'s, only slightly more than one-third the 1968 pack of 224,000 cases. The packs of canned sweet and tart cherries were reduced 23 percent and 51 percent respectively.

Because of increased bearing acreage, the upward trend in the canned peach pack was continued. Canned peach production is estimated at 390,000 cases, 5 percent above the 1968 pack of 372,000 cases. Production of canned pears and canned mixed fruit was also above the 1968 level.

FRENCH CANNED FRUIT PRODUCTION

Item	1967 [1]	1968 [2]	1969 [3]
	1,000 cases [4]	*1,000 cases* [4]	*1,000 cases* [4]
Apricots	230	224	60
Sweet cherries	322	253	195
Tart cherries	60	41	20
Mixed fruit [5]	497	574	620
Peaches	321	372	390
Pears	322	238	285

[1] Production of tart cherries includes fruit packed in water. All other items include only fruit packed in sirup. [2] Revised. [3] Estimated. [4] 24/2½'s. [5] Including fruit cocktail, fruit salad, and other fruit mixes.

Hamburg Prices of Canned Fruit, Juices

The following quotations represent importers' selling prices, including duty and sugar-added levy but excluding the value-added tax. Sales are in lots of 50 to 100 cases.

Type and quality	Size of can	Price per dozen units Oct. 1968	July 1969	Oct. 1969	Origin
CANNED FRUIT		*U.S. dol.*	*U.S. dol.*	*U.S. dol.*	
Apricot halves:					
Choice	2½	2.88	2.82	3.12	Spain
Not specified	2½	2.88	2.85	3.27	Greece
Peaches, halves:					
Choice, light sirup	2½	3.81	3.63	3.66	U.S.
Do	10	13.65	12.60	13.35	S. Africa
Choice	2½	—	—	3.00	Greece
Not specified	2½	2.85	2.79	2.88	Greece
Do (whites)	2½	—	2.61	2.61	Bulgaria
Pears:					
Heavy sirup	2½	3.96	3.78	3.75	Italy
Fruit cocktail:					
Heavy sirup	2½	5.70	5.25	5.37	U.S.
Choice, light sirup	2½	—	4.65	4.56	U.S.
Light sirup	1/1	—	—	4.38	Italy
Cherries, red pitted:					
Fancy water pack	10	—	24.45	22.65	U.S.
Not specified, water	3 kg.	23.10	21.90	21.90	Italy
Do	3 kg.	—	19.74	19.74	Netherlands
Do	5 kg.	31.80	24.60	24.30	Yugoslavia
Cherries, sweet:					
Not specified	[1] 1/1	4.53	4.54	4.54	Poland
Pineapple, whole slices:					
Fancy	2½	5.25	5.31	5.31	U.S.
Choice	2½	3.80	4.11	4.18	U.S.
Not specified	2½	—	4.20	4.38	Philippines
Do	2½	3.27	2.91	3.48	Ivory Coast
Do	2½	3.26	3.18	3.36	S. Africa
Pineapple, pieces and halves:					
Not specified	2½	2.85	—	3.06	Taiwan
Do	211	1.89	1.98	2.00	Philippines
Do	1 tall	—	1.72	1.96	S. Africa
Pineapple, crushed:					
Fancy	10	14.10	—	14.70	U.S.
Do	10	11.70	12.90	11.82	Philippines
Choice	10	12.00	8.85	9.00	S. Africa
CANNED JUICES					
Grapefruit, unsweetened	[1] 1 qt.	4.40	4.50	4.35	U.S.
Do	43 oz.	—	3.60	3.66	Greece
Do	43 oz.	4.20	4.30	4.30	Israel
Do	2	1.98	1.86	1.83	Israel
Do	2	1.89	1.59	1.68	China, Mainland
Orange, unsweetened	43 oz.	3.39	3.24	3.27	Greece
Do	43 oz.	2.88	2.97	3.00	Italy
Do	[1] 0.7 ltr.	2.91	2.37	2.37	Israel

[1] Packed in glass.

West German Tender for Iceberg Lettuce

A tender allowing imports of iceberg lettuce into West Germany from the United States was announced in *Bundesanzeiger* No. 213 in mid-November. Applications for import licenses will be accepted until the value limit is reached, but not later than December 30, 1970. The imported product must at least meet the requirements of EC quality class II and also the general plant quarantine regulations. The import licenses issued will be valid for 6 months. The first day of customs clearance is January 1, 1970.

The above tender covers all of 1970. Along with the rather liberal conditions of the tender a regular trade in iceberg lettuce may be expected to develop. Although the tender provides for the possibility of an import embargo which would invalidate import licenses 10 days after publication, it is highly unlikely that such an action will be taken.

West German Canned Asparagus Tender

The West German tender for canned asparagus spears (originally published in *Bundesanzeiger* 147, Aug. 13, 1969) has been extended. The announcement of extension was published in *Bundesanzeiger* 208, November 7, 1969.

Further applications for import licenses under this tender will be accepted until December 30, 1969.

London Prices of Canned Fruit, Juices

The following quotations indicate selling prices in London, c.i.f. basis, unless otherwise indicated:

Type and quality	Size of can	Price per dozen units Oct. 1968	July 1969	Oct. 1969	Origin
CANNED FRUIT		*U.S. dol.*	*U.S. dol.*	*U.S. dol.*	
Apricots, halves:					
Fancy	2½	2.82	2.91	2.91	S. Africa
Choice	2½	2.94	[1] 3.30	[1] 3.30	Australia
Do	2½	2.70	[1] 3.12	[1] 3.12	S. Africa
Not specified	15 oz.	1.44	1.32	1.32	Spain
Fruit cocktail:					
Choice	303	2.48	2.38	[2] 2.08	U.S.
Do	2½	3.72	[1] 3.96	[1] 3.96	Australia
Fruit salad:					
Choice	15 oz.	1.74	1.62	[1] 1.62	Spain
Peaches, cling halves:					
Choice	2½	—	3.56	[2] 2.88	U.S.
Do	2½	2.70	[1] 3.18	[1] 3.18	S. Africa
Do	2½	2.91	[1] 3.24	[1] 3.24	Australia
Pears:					
Fancy	2½	2.97	3.18	3.18	S. Africa
Choice	2½	2.85	3.09	3.09	S. Africa
Do	2½	5.70	4.71	[2] 3.75	U.S.
Do	2½	3.00	[1] 3.39	[1] 3.39	Australia
Pineapple slices:					
Fancy	16 oz.	1.68	—	1.74	S. Africa
Choice	2½	—	—	[2] 3.24	Taiwan
Grapefruit sections:					
Not specified	2	2.34	2.34	2.52	Israel
Do	20 oz.	—	2.31	2.31	West Indies (British)
CANNED JUICE					
Grapefruit, unsweetened	43 oz.	2.97	—	3.27	Israel
Do	19 oz.	1.34	—	1.50	Israel
Do	2	—	—	1.32	West Indies (British)
Orange, unsweetened	43 oz.	3.03	—	3.27	Israel
Do	19 oz.	1.38	—	1.50	Israel

[1] Landed terms. [2] F.o.b. [3] Ex store.

U.S. Cotton Exports Still Lagging

U.S. cotton exports totaled 167,719 running bales in October 1969. This total, while slightly higher than the 141,000 bales exported in September and 152,000 bales in October 1968, still does not reflect the usual seasonal rise. Shipments during the first quarter (August-October) of the 1969-70 crop year amounted to 456,000 bales, down from the 627,000 bales exported during the same period last season.

Exports to Europe were down to about one-half of the amount shipped to these countries during the first quarter of 1968; shipments to Japan and the Republic of Korea were down about one-third. However, exports to India and Indonesia were up sharply.

U.S. COTTON EXPORTS BY DESTINATION
[Running bales]

Destination	Year beginning August 1 Average 1960-64	1967	1968	Aug.-Oct. 1968	Aug.-Oct. 1969
	1,000 bales	*1,000 bales*	*1,000 bales*	*1,000 bales*	*1,000 bales*
Austria	23	1	0	0	0
Belgium-Luxembourg	121	45	30	6	5
Denmark	14	10	1	1	[1]
Finland	17	11	3	0	3
France	319	148	88	21	6
Germany, West	269	100	31	7	6
Italy	345	253	62	23	13
Netherlands	110	36	19	4	4
Norway	13	7	5	2	[1]
Poland	125	77	106	20	0
Portugal	21	9	8	2	2
Spain	74	7	5	2	[1]
Sweden	81	75	51	9	7
Switzerland	74	60	32	10	3
United Kingdom	244	125	48	10	5
Yugoslavia	112	67	54	0	0
Other Europe	17	24	1	1	1
Total Europe	1,979	1,055	550	118	55
Algeria	9	13	27	7	2
Australia	61	17	0	0	[1]
Bolivia	7	0	0	0	0
Canada	353	142	108	20	26
Chile	18	1	[1]	[1]	[1]
Colombia	3	0	[1]	0	0
Congo (Kinshasa)	6	13	0	0	0
Ethiopia	9	22	9	5	1
Ghana	1	12	17	5	2
Hong Kong	148	299	194	76	19
India	314	342	174	5	29
Indonesia	40	70	105	0	55
Israel	15	4	1	1	0
Jamaica	4	1	2	0	0
Japan	1,192	1,103	536	153	103
Korea, Republic of	261	351	447	130	87
Morocco	12	35	19	1	3
Pakistan	14	18	1	0	8
Philippines	123	154	119	34	14
South Africa	41	23	9	1	1
Taiwan	209	378	259	44	36
Thailand	34	90	66	17	2
Tunisia	2	14	0	0	0
Uruguay	6	0	0	0	0
Venezuela	8	[1]	[1]	[1]	[1]
Vietnam, South	46	24	62	6	9
Other countries	9	25	26	4	4
Total	4,924	4,206	2,731	627	456

[1] Less than 500 bales.

U.S. Leaf Exports Up in October

United States exports of unmanufactured tobacco during October totaled 62.4 million pounds valued at $64 million. These shipments are relatively high for October and compare with 38.8 million pounds, valued at $35.1 million, during the same month of 1968.

Cumulative leaf exports during January-October 1969 totaled 425.2 million pounds, valued at $389.5 million. These exports, continuing this year's downward trend, were down about 8 percent in volume and 2 percent in value from the near-record shipments in the same period of 1968. Ex-

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cept for exports of burley, which were up about 12 percent, all exports of unmanufactured leaf were running below the 10-month level of a year ago. Flue-cured shipments, the major kind of U.S. leaf exported, were down about 26 million pounds, or 7.6 percent, from a year ago. Black Fat (a semiprocessed, fire-cured leaf) and cigar-binder leaf were at least two-thirds less than in the same period of 1968.

The export value of tobacco products was up significantly in October, although it too continued to lag for the 10-month cumulative period. For January-October it was down about 3.3 percent from the same months of 1968. Cigarette exports at 20.6 billion pieces were down about 5 percent from the high level of 1968—21.8 billion pieces.

U.S. EXPORTS OF UNMANUFACTURED TOBACCO
[Export weight]

Kind	October		January-October		Change from
	1968	1969	1968	1969	1968
	1,000 pounds	*1,000 pounds*	*1,000 pounds*	*1,000 pounds*	*Percent*
Flue-cured	29,567	48,531	340,060	314,298	— 7.6
Burley	1,404	2,576	35,115	39,176	+11.6
Dark-fired Ky.-Tenn.	707	2,240	17,540	15,917	— 9.3
Va. fire-cured [1]	263	43	4,437	3,217	—27.5
Maryland	558	1,496	11,806	8,891	—24.7
Green River	28	—	502	440	—12.4
One Sucker	218	55	729	313	—57.1
Black Fat	148	107	2,195	770	—64.9
Cigar wrapper	410	223	4,014	2,026	—49.5
Cigar binder	80	41	2,091	572	—72.6
Cigar filler	294	25	570	457	—19.8
Other	5,104	7,089	44,776	39,160	—12.5
Total	38,781	62,426	463,835	425,237	— 8.3
	Mil. dol.	*Mil. dol.*	*Mil. dol.*	*Mil. dol.*	*Percent*
Declared value	35.1	64.0	398.4	389.5	— 2.2

[1] Includes sun-cured. Bureau of the Census.

U.S. EXPORTS OF TOBACCO PRODUCTS

Kind	October		Jan.-Oct.		Change from
	1968	1969	1968	1969	1968
Cigars and cheroots					*Percent*
1,000 pieces	3,955	4,472	56,788	56,376	— 0.7
Cigarettes					
Million pieces	1,579	2,112	21,783	20,637	— 5.3
Chewing and snuff					
1,000 pounds	—	1	207	28	—86.5
Smoking tobacco in pkgs.					
1,000 pounds	53	112	1,263	910	—28.0
Smoking tobacco in bulk					
1,000 pounds	770	1,999	17,089	15,795	— 7.6
Total declared value					
Million dollars	9.1	14.0	132.2	127.9	— 3.3

Bureau of the Census.

October Tobacco Imports Down

U.S. general imports (arrivals) of unmanufactured tobacco leaf in October 1969 were relatively low—4.6 million pounds, valued at $2.3 million. This compares with 11.6 million pounds, valued at $3.5 million, in October 1968 and 12.3 million pounds, valued at $6.6 million, in October 1967. The principal reduction was in cigarette leaf and scrap imports. Imports of unstemmed cigar leaf were increased slightly.

Cumulative imports for the January-October 1969 period continued to lag with 204 million pounds, valued at $106.7 million, compared with 209 million pounds, valued at $118.1 million, in the same period of 1968. Most of the decline was in cigarette leaf other than flue-cured and burley.

U.S. GENERAL IMPORTS OF UNMANUFACTURED TOBACCO

Item	1968		1969	
	Quantity	Value	Quantity	Value
	1,000 pounds	*1,000 dollars*	*1,000 pounds*	*1,000 dollars*
January-October:				
Cigarette leaf (flue & burley)	7,851	2,310	13,418	4,508
Cigarette leaf, other	139,226	93,667	124,214	78,353
Cigar wrapper	416	1,607	549	1,683
Mixed filler & wrapper	406	1,797	587	2,254
Cigar filler, unstemmed	27,781	8,561	33,033	10,110
Cigar filler, stemmed	2,442	3,044	2,069	2,216
Scrap	30,623	7,076	29,176	7,593
Stems	538	36	1,025	23
Total	209,283	118,098	204,071	106,740
October:				
Cigarette leaf (flue & burley)	280	69	594	481
Cigarette leaf, other	2,865	1,406	282	83
Cigar wrapper	33	143	7	31
Mixed filler & wrapper	85	465	153	562
Cigar filler, unstemmed	1,281	418	1,302	403
Cigar filler, stemmed	36	49	408	241
Scrap	7,038	958	1,883	461
Stems	17	1	—	—
Total	11,635	3,509	4,629	2,262

Bureau of the Census.

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